CLAIMS

1. A manufacturing method of a photoelectric conversion device, whereby a paste in which semiconductor fine grain and a binder made of a polymer compound are mixed is coated onto a transparent conductive substrate and sintered, thereby forming a semiconductor layer made of the semiconductor fine grain,

wherein after said semiconductor layer is formed, ultraviolet rays are irradiated to said semiconductor layer and, by using a photocatalyst effect of said semiconductor fine grain, an organic substance remaining in said semiconductor layer is removed.

2. A manufacturing method of the photoelectric conversion device according to claim 1, wherein one kind or two or more kinds of semiconductor fine grain exhibiting photocatalyst activity is used as said semiconductor fine grain.

3. A manufacturing method of the photoelectric conversion device according to claim 1, wherein said semiconductor fine grain exhibiting the photocatalyst activity is made of titanium oxide, zinc oxide, or strontium titanate.

4. A manufacturing method of the photoelectric conversion device according to claim 1, wherein said polymer compound is a polymer compound having viscosity improving effect.

5. A manufacturing method of the photoelectric conversion device according to claim 4, wherein said polymer compound having said viscosity improving effect is polyethylene glycol or polystyrene.

6. A photoelectric conversion device using a semiconductor layer made of semiconductor fine grain,

wherein a paste in which said semiconductor fine grain and a binder made of a polymer compound are mixed is coated onto a transparent conductive substrate and sintered, thereby forming the semiconductor layer made of said semiconductor fine grain, after that, ultraviolet rays are irradiated to said semiconductor layer and, by using a photocatalyst effect of said semiconductor fine grain, an organic substance remaining in said semiconductor layer is removed.

7. A photoelectric conversion device using a semiconductor layer made of semiconductor fine grain,

wherein an organic substance does not substantially remain in said semiconductor layer.

8. A photoelectric conversion device according to claim 7, wherein a content of a carbon component in said semiconductor layer is equal to or less than 1 atom%.

9. A photoelectric conversion device according to claim 7, wherein a content of a carbon component in said semiconductor layer is equal to or less than 0.3 atom%.

10. A manufacturing method of an electronic apparatus, whereby a paste in which semiconductor fine grain and a binder

made of a polymer compound are mixed is coated onto a substrate and sintered, thereby forming a semiconductor layer made of said semiconductor fine grain,

wherein after said semiconductor layer is formed, ultraviolet rays are irradiated to said semiconductor layer and, by using a photocatalyst effect of said semiconductor fine grain, an organic substance remaining in said semiconductor layer is removed.

11. An electronic apparatus using a semiconductor layer made of semiconductor fine grain,

wherein a paste in which said semiconductor fine grain and a binder made of a polymer compound are mixed is coated onto a substrate and sintered, thereby forming the semiconductor layer made of said semiconductor fine grain, after that, ultraviolet rays are irradiated to said semiconductor layer and, by using a photocatalyst effect of said semiconductor fine grain, an organic substance remaining in said semiconductor layer is removed.

12. An electronic apparatus using a semiconductor layer made of semiconductor fine grain,

wherein an organic substance does not substantially remain in said semiconductor layer.

13. A manufacturing method of a semiconductor layer, whereby a paste in which semiconductor fine grain and a binder made of a polymer compound are mixed is coated onto a substrate and sintered, thereby forming the semiconductor layer made of said semiconductor fine grain,

wherein after said semiconductor layer is formed, ultraviolet rays are irradiated to said semiconductor layer and, by using a photocatalyst effect of said semiconductor fine grain, an organic substance remaining in said semiconductor layer is removed.

14. A semiconductor layer made of semiconductor fine grain,

wherein a paste in which said semiconductor fine grain and a binder made of a polymer compound are mixed is coated onto a substrate and sintered, thereby forming the semiconductor layer made of said semiconductor fine grain, after that, ultraviolet rays are irradiated to said semiconductor layer and, by using a photocatalyst effect of said semiconductor fine grain, an organic substance remaining in said semiconductor layer is removed.

15. A semiconductor layer made of semiconductor fine grain,

wherein an organic substance does not substantially remain in said semiconductor layer.